Minutes of the AST EVR Meeting on September 18, 2001

Meeting Place - San Joaquin Valley Air Pollution Control District (SJVAPCD) in Modesto, California. SJVAPCD offices in Fresno and Bakersfield also participated via video teleconference.

Purpose of Aboveground Storage Tank (AST) Vapor Recovery Work Group - To provide technical guidance throughout the development of EVR standards, specifications, and requirements for AST vapor recovery systems. The workgroup participants were asked to review and comment on documents developed as an outcome of the workgroup activities. Workgroup participants were also asked to provide resources for testing or researching various aspects of AST vapor recovery systems as needed.

AST Enhanced Vapor Recovery (EVR) Rulemaking Agenda - The AST EVR rulemaking package is tentatively scheduled to be presented at an ARB hearing in October, 2002. Prior to the hearing, there will be at least two public workshops to discuss draft AST EVR requirements, standards, and specifications. It is anticipated that the workshops will be in January and March of 2002. The regulatory package will be prepared following the workshops and printed in the California Register in August for the 45-day public comment period. These proposed timeframes could change.

Proposed AST EVR Requirements, Standards, and Specifications - Phase I and Phase II requirements, standards, and specifications found in Certification Procedure 201 (CP-201) were discussed. ARB suggested using CP-201 as the baseline certification procedure for developing the AST EVR requirements, standards, and specifications.

Specific workgroup suggestions related to the certification procedure include:

- Standardize Phase I fill and vapor adaptors;
- Apply cam and groove specifications on AST Phase I fittings (similar to USTs);
- Require rotatable adapters on below-grade vaulted ASTs (i.e., in the ground fuel vaults), however, rotatable adapters have no value on other AST systems;
- Establish parameters for fuel delivery pumping rate;
- Evaluate the use of a dry-break with a close-coupled shutoff valve to minimize spillage during side loading operation;
- Research the applicability of using dry-breaks on fuel delivery trucks to minimize spillage during side loading operations;
- Establish leak rate on pumps which are used for removing fuel from containment boxes on side-fill configurations;
- Establish stricter allowable leak rate criteria for the 2 inch H_20 Static Pressure Performance Test than that specified in TP-201.3B. Stricter leak rate criteria will improve component design;
- Review Static Pressure Performance Test for ASTs (testing AST systems under warm ambient temperatures will mask leaks in the system because of vapor growth);

- Research AST pressure variations to better understand how a system responds to ambient conditions, fuel conditions, Phase I and Phase II operations;
- Establish vapor riser pipe dimensions for the various AST configurations;
- Test AST systems to determine the dynamic pressure drop from the nozzle to the AST;
- Review the requirement for liquid removal devices and hose configurations in G-70-52-AM and how it applies to ASTs. Issues to consider include: location or height of retractor (based on tank configuration), placement of bollards, and configuration of hose when fueling a vehicle;
- Evaluate whether to require spill container drain valves to drain into the drop tube or into the tank head space; and
- Standardize pressure/vacuum relief valve requirements.

AST EVR Certification and Test Procedures - Two alternatives for drafting the AST EVR requirements are to modify the existing CP-201 to include AST vapor recovery systems or to create a separate certification procedure specific to ASTs. There was consensus from the workgroup that a separate Certification Procedure specific to AST vapor recovery systems should be developed. The requirements, standards, and specifications developed in the Certification Procedure may be different for the various AST configurations, i.e., above grade AST, below grade vaulted AST, top fill, side fill, remote fill, top mounted dispenser, side or end-mounted dispenser, and remote mounted dispenser. Included in this discussion was the need to define AST terms. AST terms need to be defined in ARB's D-200 ("Definitions for Vapor Recovery Procedures").

The only test procedure addressed at this meeting was TP-201.3B ("Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks"). It was noted that this procedure states "not to remove" the fill dust cap during the test. Reasons for not removing the fill cap will be investigated.

AST Monitoring - ARB is currently monitoring a Convault 1000 gallon tank at the Carmichael Water District in Sacramento. ARB is monitoring tank vapor pressure, tank vapor temperature, ambient temperature, and barometric pressure. The purpose of the monitoring effort is to better understand the pressure dynamics of AST systems and how pressure is affected by ambient conditions, Phase I and Phase II operations, and fuel types. The ARB is planning to monitor three additional systems for up to 6 months. The ARB requests suggestions for AST systems to be monitored. The selected sites must be made available to ARB staff at any time. The selected site will be subject to an initial pressure integrity test and periodic testing to ensure integrity of the system during the monitoring effort. Factors to include for site selection are tank size, insulation, tank exterior, tank exposure / location, manufacturer, Phase I and Phase II piping configuration, Phase II system type (balance / assist), location and number of dispensers, hose configurations, etc.

Schedule Next Meeting – The next AST EVR Workgroup meeting is tentatively scheduled for November 14, 2001 and will be hosted by the SJVAPCD. When the meeting is confirmed, an announcement will be sent to ARB's vapor listserve and posted on ARB's vapor recovery website. A draft AST EVR Certification Procedure will be provided at the next meeting. The procedure will not include all of the requirements, standards, or specifications for ASTS, but will provide a framework for the workgroup to further develop.

Attendees:

SJVAPCD in Modesto:

Pat Bennett, ARB
Joe Guerrero, ARB
Rich Erickson, DonLee Pump
John Ekhtiar, Convault
Todd McWhorter, Pacific Environmental
Jim Swaney, San Joaquin Valley APCD
Gary Reeves, San Joaquin Valley APCD
James Espiritu, San Joaquin Valley APCD
Tom Busenbark, San Joaquin Valley APCD
Jim Harris, Amador Air District

SJVAPCD in Fresno:

Robert Vinson, San Joaquin Valley APCD

SJVAPCD in Bakersfield:

Catherine Riccomini, San Joaquin Valley APCD
John Ludwick, San Joaquin Valley APCD

OPW Representative